

040
BY HAND DELIVERY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE P#8

Application of: Taylor et al.

Serial No.: 09/724,621

Group Art Unit: 1642

Filed: November 28, 2000

Examiner: To Be Assigned

For: METHODS FOR THE PREVENTION
AND TREATMENT OF VIRAL AND
MICROBIAL INFECTIONS USING
ANTI-C3b(i) ANTIBODIES (as amended)

Attorney Docket No.: 9426-056

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.56 AND § 1.97

Assistant Commissioner for Patents
Washington, D.C. 20231

SIR:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 and § 1.97 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of any claim of the application, Attorneys for Applicants hereby direct the Examiner's attention to references AA-CI listed on the attached revised form PTO 1449 entitled "List of References Cited by Applicant." Copies of references AA-CI are submitted herewith.

Identification of the listed references is not to be construed an admission of Applicants or Attorneys for Applicants that such references are available as "prior art" against the subject application. Consequently, Applicants respectfully decline to use form PTO-1449, since this form identifies all of the references cited therein as "Prior Art." As an alternative, Applicants submit herewith several pages of a "revised form PTO 1449" entitled "List of References Cited" instead of "List of Prior Art Cited."

Applicants respectfully request that the Examiner review the foregoing references and that the references be made of record in the file history of the application.

62 MAR 29 PM 12:15 TECH CENTER 1600/2900

APR 3 0 2002

RECEIVED

Since this Information Disclosure Statement is being submitted before the mailing date of a first Office Action on the merits, no fee is believed due. However, should the Patent and Trademark Office determine otherwise, please charge any required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is enclosed for accounting purposes.

Respectfully submitted,

Date April 26, 2002

Geraldine F. Baldwin 31,232
Geraldine F. Baldwin (Reg. No.)

PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, New York 10036-2711
(212) 790-9090

Enclosure

By: Jennifer J. Chioda
Reg No. 46,617

RECEIVED

APR 30 2002

BY HAND DELIVERY

Sheet 1 of 3

TECH CENTER 1600/2900

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

9426-056

APPLICATION NO.

09/724,621

APPLICANT

Taylor et al.

FILING DATE

November 28, 2000

GROUP

1642

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	5,985,847	11/16/99	Carson et al.			
AB	6,221,621	4/14/01	Kinders et al.			
BW	5,376,356	12/27/94	Morgan, Jr.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AC	WO 98/39659	09/11/98	PCT				
	AD	WO 97/38136	10/16/97	PCT				
	AE	WO 96/37234	11/28/96	PCT				
	AF	EP 0448464	09/25/91	Europe				
	BX	WO 87/06344	10/22/87	PCT				

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AG	Castronovo V et al., 1989, "Possible role of human natural anti-Gal antibodies in the natural antitumor defense system, "J Natl Cancer Inst. 81(3):212-6.
AH	Clark JI et al., "Natural killer cell-directed bispecific antibodies", in <u>Bispecific Antibodies</u> , Fanger MW (ed.), RG Landis Co., Austin, pp. 77-88.
AI	de Gast GC et al., 1997, "Clinical perspectives of bispecific antibodies in cancer, "Cancer Immunol Immunother. 45(3-4):121-3.
AJ	Deo et al., 1998, J. of Immunol., 160: 1677 Abstract
AK	Desai PR et al., 1995, "Anti-Thomsen-Friedenreich (T) antibody-based ELISA and its application to human breast carcinoma detection, "J Immunol Methods. 188(2):175-85.
AL	Dodds and Sim (eds.), <u>Complement: A Practical Approach</u> , 1997, Oxford University Press.
AM	Edberg JC et al., 1988, "Quantitative analyses of the relationship between C3 consumption, C3b capture, and immune adherence of complement-fixing antibody/DNA immune complexes, "J Immunol. 141(12):4258-65.
AN	Gorter A et al., 1996, "Expression of CD46, CD55, and CD59 on renal tumor cell lines and their role in preventing complement-mediated tumor cell lysis, "Lab Invest. 74(6):1039-49.
AO	Gross DJ et al., 1988, "An immunochemical assay for natural IgM antibodies with an affinity to galactose and whose titer is reduced in the sera of cancer patients, "Eur J Cancer Clin Oncol. 24(3):363-7.
AP	Hakomori S, "Tumor malignancy defined by aberrant glycosylation and sphingo(glyco)lipid metabolism, "Cancer Res. 1996 Dec 1;56(23):5309-18.
AQ	Higuchi et al., 1980, "Natural humoral immunity in patients with malignant diseases", J Clin Lab Immunol. 4:141-143.
AR	Howard and Hughes Jones, 1988, Monoclonal Antibody Therapy, Vol. 45, p. 3
AS	Irie et al., 1975, "Demonstration of In Vivo Reaction of Anti Body and Complement to Human Cancer Cells by Mixed Hemadsorption", Proc. Amer. Assoc. Cancer Res. Vol 16, p. 170, Abstract
AT	Irie K et al., 1974, "Evidence for in vivo reaction of antibody and complement to surface antigens of human cancer cells, "Science. 186(4162):454-6.
AU	Jarvis GA et al., 1997, "Expression and function of the complement membrane attack complex inhibitor protectin (CD59) in human prostate cancer. Int J Cancer. 71(6):1049-55.

RECEIVED

APR 30 2007

BY HAND DELIVERY

Sheet 2 of 3

TECH CENTER 1600/2900

AV	Maenpaa A et al., 1996, "Expression of complement membrane regulators membrane cofactor protein (CD46), decay accelerating factor (CD55), and protectin (CD59) in human malignant gliomas, "Am J Pathol. 148(4):1139-52.
AW	Makrides SC et al., 1992, "Cell surface expression of the C3b/C4b receptor (CR1) protects Chinese hamster ovary cells from lysis by human complement, "J Biol Chem. 267(34):24754-61.
AX	Mehta RL et al., 1986, "Binding and catabolism of aggregated immunoglobulins containing C3b by U937 cells, "J Immunol. 136(5):1765-71.
AY	Michael et al., "Synthesis of iC3b/C3d and Expression of a CD21-Like Protein by Malignant Epithelium", Growth Factors and Receptors I: Abstract 2167
AZ	Mollnes TE et al., 1987, "Activation of the third component of complement (C3) detected by a monoclonal anti-C3'g' neoantigen antibody in a one-step enzyme immunoassay, "J Immunol Methods. 101(2):201-7.
BA	Neri et al., 1983, J. of Gynaecological Oncology, 4:37 Abstract
BB	Niculescu F et al., 1992, "Persistent complement activation on tumor cells in breast cancer, "Am J Pathol. 140(5):1039-43.
BC	Okada H and Baba T, 1974, "Rosette formation of human erythrocytes on cultured cells of tumour origin and activation of complement by cell membrane, " Nature. 248(448):521-2.
BD	Paul et al., 1993, Immunology, Fundamental Immunology, 3 rd ed., Raven Press, NY, P. 934
BE	Perlmann et al., 1982, "Interaction of Target Cell-Bound C3bi and C3d With Human Lymphocyte Receptors", J. Exp. Med. 153:1592-1603
BF	Petronis JD et al., 1998, "Indium-111 capromab pendetide (ProstaScint) imaging to detect recurrent and metastatic prostate cancer, "Clin Nucl Med. 23(10):672-7.
BG	Reiter et al., "Killing of Human Tumor Cells By Antibody C3b Conjugates and Human Complement", 119-135
BH	Renner C et al., 1995, "Tumor therapy by immune recruitment with bispecific antibodies, "Immunol Rev. 1995 Jun;145:179-209.
BI	Schlom et al. 1991, "Monoclonal Antibodies: They're more or less than you think", Molecular Foundations of Oncology, pp. 95-134
BJ	Seegal BC et al., 1976, "Immunoglobulins, complement and foreign antigens in human tumor cells, "Int Arch Allergy Appl Immunol. 1976;52(1-4):205-11.
BK	Segal DM et al., "T-cell targeted cytotoxicity" in Bispecific Antibodies, Fanger MW (ed.), RG Landis Co., Austin, pp. 27-42.
BL	Springer GF, 1997, "Immunoreactive T and Tn epitopes in cancer diagnosis, prognosis, and immunotherapy, "J Mol Med. 75(8):594-602.
BM	Springer GF, 1984, "T and Tn, general carcinoma autoantigens, "Science. 224(4654):1198-206.
BN	Taylor RP et al., 1997, "Clearance of blood-borne pathogens mediated through bispecific monoclonal antibodies bound to the primate erythrocyte complement receptor, "Cancer Immunol Immunother. 1997 Nov-Dec;45(3-4):152-5.
BO	Taylor RP et al., 1989, "Quantitative analyses of C3b capture and immune adherence of IgM antibody/dsDNA immune complexes, "J Immunol. 143(11):3626-31.
BP	Taylor et al., 1991, "Use of heteropolymeric monoclonal antibodies to attach antigens to the C3b receptor of human erythrocytes: A potential therapeutic treatment", Proc. Natl. Acad. Sci. USA 88:3305-3309
BQ	Thornton BP et al., 1996, "Function of C3 in a humoral response: iC3b/C3dg bound to an immune complex generated with natural antibody and a primary antigen promotes antigen uptake and the expression of co-stimulatory molecules by all B cells, but only stimulates immunoglobulin synthesis by antigen-specific B cells, "Clin Exp Immunol. 104(3):531-7.
BR	Tosic L et al., 1989, "Preparation of monoclonal antibodies to C3b by immunization with C3b(i)-sepharose, "J Immunol Methods. 120(2):241-9.
BS	Vetvicka V et al., 1999, "Regulation of CR3 (CD11b/CD18)-dependent natural killer (NK) cell cytotoxicity by tumour target cell MHC class I molecules, "Clin Exp Immunol. 115(2):229-35.
BT	Vetvicka V et al., 1997, "Targeting of natural killer cells to mammary carcinoma via naturally occurring tumor cell-bound iC3b and beta-glucan-primed CR3 (CD11b/CD18), "J Immunol. 159(2):599-605.
BU	Vetvicka V et al., 1996, "Soluble beta-glucan polysaccharide binding to the lectin site of neutrophil or natural killer cell complement receptor type 3 (CD11b/CD18) generates a primed state of the receptor capable of mediating cytotoxicity of iC3b-opsonized target cells, "J Clin Invest. 98(1):50-61.
BV	Weisman HF et al., 1990, "Soluble human complement receptor type 1: in vivo inhibitor of complement suppressing post-ischemic myocardial inflammation and necrosis, "Science. 249(4965):146-51.
BY	Campbell et al., 1994, "Mechanisms of Binding of Brucella abortus to mononuclear phagocytes from cows naturally resistant or susceptible to brucellosis", Veterinary Immun. And Immunopath. 41:295-306.
BZ	Dempsey et al., 1996, "C3d of Complement as a Molecular Adjuvant: Bridging Innate and Acquired Immunity", Science 271:348-350.

	CA	Deo et al., 1998, "Bispecific molecules directed to the Fc receptor for IgA (Fc α RI, CD89) and tumor antigens efficiently promote cell mediated cytotoxicity of Tumor Targets in Whole Blood", J. Immun. 167:1677-1681
	CB	Emery and Harris, 1995, "Strategies for Humanizing Antibodies", Chapter 6, Antibody Engineering, 2 nd Ed., Oxford Univ. Press, pp. 159-160, 180-181
	CC	Huemer et al., 1993, "Herpes simplex virus glycoprotein C: Molecular mimicry of complement regulatory proteins by a viral protein", Immunol. 79: 639-647
	CD	McCormick et al., 1997, "Bispecific Antibodies Overcome the Opsonin-Receptor Mismatch of Cystic Fibrosis In Vitro", J. of Immun. 3476-3482.
	CE	Krettl et al., 1985, "Binding of C3 fragments to the Trypanosoma cruzi surface in the absence of specific antibodies and without activation of the complement cascade", Clin Exp Immunol. 62:270-277
	CF	Newman et al., 1985, "Deposition of C3b and iC3b onto particulate activators of the human complement system" J. Exp. Med. 161:1414-1431
	CG	Seya et al., 1990, "Complement-mediated tumor cell damage induced by antibodies against membrane cofactor protein (MCP, CD46)", J. Exp. Med. 172: 1673-1680
	CH	Tamerius et al., 1985, "Detection of a neoantigen on human C3bi and C3d by monoclonal antibody", J. of Immunol. 135:2015-2019.
	CI	Vaporciyan et al., 1993, "Enhanced Generation of O ₂ ⁻ by human Neutrophils via a complement eC3b/Mac-1 Interaction", Biol Signals 2:126-135.
EXAMINER		DATE CONSIDERED
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		